STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
DIVISION OF GROUNDWATER AND ISDS

AMENDMENTS TO

Rules and Regulations Establishing Minimum Standards Relating To Location, Design, Construction and Maintenance of Individual Sewage Disposal Systems

Amendments of

February 2000

NOTE: All previous amendments were incorporated into one regulation document dated September 1998.

AUTHORITY: These regulations are adopted in accordance with Chapter 42-35 pursuant to Chapters 42-17.1, 23-19.5, and 5-56.1 of the Rhode Island General Laws of 1956, as amended.

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
Office of Water Resources

AMENDMENTS TO THE

RULES AND REGULATIONS ESTABLISHING MINIMUM STANDARDS RELATING TO LOCATION, DESIGN, CONSTRUCTION AND MAINTENANCE OF INDIVIDUAL SEWAGE DISPOSAL SYSTEMS

February 2000

The Department of Environmental Management Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance of Individual Sewage Disposal Systems have been amended, such that changes have been made to the following sections: 2.01, 2.02, 2.05A, 2.05B, 15.05, 17.02, 26.00, and 26.01. These sections are all included herein.

These amendments eliminate the need for two sections labeled 2.02 (2.02A and 2.02B), resulting in one section 2.02. As a result, references to these sections have been corrected in the following sections (none of which are included herein): 2.00(a)(1), 2.00(a)(3)(B), 2.03(a), 19.02.1(d)(1), 21.01(b)(3)(C), 21.01(c) and 27.00(a).

In addition, Appendix 1, Appendix 2 and the Site Evaluation Form have been added.

SD 2.01 Applications for the Installation of New Systems or the Alteration or Repair of Existing Individual Sewage Disposal Systems

(a) No person shall install, construct, alter or repair or cause to be installed, constructed, altered or repaired any individual sewage disposal system without first obtaining the Director's written approval of the plans and specifications for such work. Certifications of Site Suitability approved in accordance with SD 18.00 et seq. shall not be construed to operate as an approval for the construction of any ISDS.

(b) Application for New System - All applications for new systems shall be made in conformance with all requirements under these regulations. Applications not in conformance with these regulations may be approved only through the variance procedures set forth in SD 20.00 through SD 20.03.

(1) Beginning one year after the issuance of the first soil evaluator's license, no person shall submit plans and specifications to the Director for a new system without first obtaining the Director's approval of a site evaluation in accordance with SD 26.00 and SD 26.01. The Director shall provide a public notice announcing the effective date of this provision at least 60 days prior to the effective date. The site evaluation application procedure shall not be effective until said date of this provision.

(2) All plans and specifications for a new system shall be prepared by a Class II or Class III licensed designer in accordance with SD 25.00.

(3) An application for a new system shall be made whenever an applicant proposes to:

(A) Construct a new structure from which sewage will have to be disposed of by means of an individual sewage disposal system; or

(B) Modify an existing structure, not previously permitted to dispose of sewage, so as to require the disposal of sewage to an individual sewage disposal system; or

(C) Increase sewage flow to an existing system by an amount greater than twenty-five percent (25%) of the original design flow; or

(D) Improve an existing residence through the addition of more than one bedroom; or

(E) Change the use of a structure in conformance with SD 2.00(a)(2)(A) and, as a prerequisite thereto, has been required to install a new system as the result of a System Suitability Determination.

(c) Application for Alteration

(1) All plans and specifications for an alteration to an ISDS shall be prepared by a person licensed as a Class II or Class III designer in accordance with SD 25.00. The applicant is not required to have a site evaluation report prepared unless the Department specifies otherwise. The Director reserves the right to require that the plans and specifications for an alteration be prepared by a Class III designer.

(2) An application for an alteration of an existing individual sewage disposal system shall be made whenever an applicant proposes a change in the size of an ISDS, a modification of an ISDS, or a building renovation or change of use (as defined in SD 1.00) of any structure discharging sewage into the system.

(A) The phrase "change in size," as used herein, shall mean any physical alteration to a system which will allow the system to accommodate:

(i) In the case of a residence, the additional sewage flow resulting from the addition of not more than one bedroom; or

(ii) In all other cases, an increased flow of sewage in an amount less than or equal to twenty-five percent (25%) of the design flow.

(B) Changes in size which will accommodate increased sewage flows resulting from more than one bedroom or in an amount greater than twenty-five percent (25%) of the design flow must obtain a permit for a new system in conformance with SD 2.01(b), above. All sewage flows will be determined in conformance with SD 3.00.

(C) The phrase "modification of an ISDS," as used herein, shall mean a change in the type of system or a modernization of an existing system.

(D) An application for alteration shall be made when required by the Individual Sewage Disposal System Program in response to an application for System Suitability Determination, as described in SD 2.00(a)(2).

(E) Applicants shall meet the requirements of these regulations to the greatest extent possible. If necessary, certain requirements under these regulations may be relaxed at the discretion of the Director, provided that the applicant consider the Department approved innovative or alternative technology in accordance with SD 14.06 that may allow the applicant to meet most of the requirements of these regulations. The protection of the public health and the environment shall be given priority over all other considerations. Nothing herein shall prevent the Director from requesting additional information or imposing any requirement under these regulations that he/she may deem appropriate including request for variance SD 20.00.

(d) Application for Repair - An application for a repair of any individual sewage disposal system, or any component thereof, shall be made when an existing system or component has failed, as defined by SD 1.00.

(1) All plans and specifications for a repair to an ISDS shall be prepared by a person licensed as a Class I, II or III designer in accordance with SD 25.00. The applicant is not required to have a site evaluation report prepared unless the Department specifies otherwise. The Director reserves the right to require that the plans and specifications for a repair be prepared by a Class II or Class III licensed designer.

(2) An application for repair shall not propose any construction, building renovation or change of use of a structure pursuant to SD 2.00.

(3) An application for repair shall not propose any increase in the original design flow of the system. Sewage flows shall be determined in conformance with SD 3.00.

(4) The approval of an application for repair shall not authorize any building renovation of any structure.

(5) Applicants shall meet the requirements of these regulations to the greatest extent possible. If necessary, certain requirements under these regulations may be relaxed at the discretion of the Director, provided that such modification is consistent with the protection of the public health and the environment. In reviewing any request for relaxation of these regulations, the protection of the public health and the environment shall be given priority over all other considerations.

SD 2.02 Content of Applications for Approval of Individual Sewage Disposal System Permits

(a) Form of Application - All applications for the approval of plans and specifications for sewage disposal system permits shall be made on forms provided by the Director.

(b) Applications Involving Freshwater Wetlands - All applications submitted in accordance with these regulations which also involve freshwater wetlands shall be accompanied by all appropriate determination(s), approval(s) or permit(s) required by the Department of Environmental Management. Accordingly, where an applicant proposes to construct a new individual sewage disposal system, he/she must first apply for and receive the appropriate determination, approval or permit. No individual sewage disposal system application will be approved unless it is accompanied by the appropriate determination, approval or permit issued by the Department. Effective August 18, 1999, review of impacts to freshwater wetlands in the vicinity of the coast are under the sole jurisdiction of the Rhode Island Coastal Resources Management Council in accordance with the "Rule and Regulations Governing the Protection and Management of Freshwater Wetlands in the Vicinity of the Coast" (August 1999). See SD 2.17 Individual Sewage Disposal System Application Involving Shoreline Features.

(c) Basic Design Data - All applications shall be accompanied by basic design data and a plan, to scale, of the property or the pertinent portion thereof showing the size and location of the sewage disposal system, building sewer lines, manholes, cleanout plugs, essential invert elevations and a fixed bench mark within 150 feet of the system that will not be disturbed during construction.

(d) Required Information - Other information to be provided by the applicant shall include, but not be limited to, the following:

(l) The existing and proposed finished grades in the vicinity of the system;
(2) The location of an alternate disposal area in those areas served by wells, in conformance with SD 2.14;
(3) The results and location of water table test pits, in conformance with SD 17.00 et seq.;
(4) The results and location of the percolation tests, in conformance with SD 15.00 et seq.;
(5) A description of the soil profile, in conformance with SD 15.00 et seq.;
(6) The maximum elevation of the ground water table in the location of the proposed system, in conformance with SD 17.00 et seq.;
(7) The size and location of all existing and proposed buildings and the number of bedrooms, or other building features used to determine the maximum daily flow, contained therein;
(8) The location of any public sewer line within 200 feet of the property lines;
(9) The location of any drinking water line within 25 feet of the proposed disposal system or alternate area;
(10) The location of any watercourse, wetlands, and/or any existing or proposed private wells or drains within 200 feet of the proposed disposal system and/or alternate area;
(11) The location of the proposed disposal system or alternate area relative to any watershed of a public water supply or critical resource area in conformance with SD 19.00, 19.02 & 19.03;

(12) The location of all existing or proposed public drinking water supply wells within 500 feet of the proposed disposal system or alternate area;
(13) The location of any surface waters or tributaries thereto, including storm and subsurface drains discharging thereto, within 200 feet of the proposed disposal system and/or alternate area and whether said drain discharges, directly or indirectly, into a critical resource area as identified in SD 19.00 through 19.03; and
(14) The location of all existing individual sewage disposal systems within 100 feet of any well to be installed on the subject property. ***NOTE:** Records and data on file with the Department of Environmental Management may be used to obtain information on proposed individual sewage disposal systems and wells.

The Director reserves the right to require any additional information which he/she deems necessary.

(e) Systems Disposing of 5,000 GPD or More - Each application relating to a sewage disposal system that will service either a proposed new building or the expansion of an existing building or system, which system will dispose of 5,000 gallons per day or more of sewage as a result of said construction or expansion, shall be accompanied by a list identifying the names and addresses of the local building official, the water supply agency whose water supply is drawn from the watershed wherein the property is located, if applicable, and all property owners within 200 feet of any component of the proposed system.

(1) Upon application, the applicant shall notify each person identified in SD 2.03(e), above, of the application by certified mail, return receipt requested.

(2) Each notice shall substantially conform to a form to be provided by the Director and shall include the application number and a certificate of service.

(3) The applicant shall clearly mark each return receipt with the application number and the words "5000 Gallon System."

(4) All persons subject to the notice shall be permitted twenty (20) days from the date specified in the certificates of service within which to submit written comments or information bearing upon the subject application.

(5) All timely submitted comments or information bearing upon the subject application and relating to the intent and purpose of these regulations shall be considered by the Individual Sewage Disposal System program staff as part of their review of the application.

(6) When all certified receipts have been returned to the applicant, copies of each notice, accompanied by the appropriate certified receipt, shall be filed with the Individual Sewage Disposal System Program along with a letter requesting that the application be reviewed for final determination.

(7) If a correctly addressed, certified notice is returned to the applicant, the applicant may submit the returned envelope and certified receipt, unopened, along with the other return receipts as proof of the applicant's good faith attempt to serve the notice.

(f) Applicant's Responsibilities - The applicant shall be responsible for providing all information required by these regulations in a complete and accurate manner. Nothing in these regulations shall prevent the Director from requiring any additional information he/she deems necessary to carry out his/her obligations in enforcing these regulations.

(g) Field Data - Field data shall be considered valid for a period of five (5) years from the time of initial certification by the Department or five (5) years from the date of initial approval of any ISDS application, design, or subdivision suitability where the data were used, whichever occurred most recently.

(1) Field data compiled prior to July 21, 1987 may not be revalidated.

(2) Field data older than five (5) years may be used provided that:

(A) The field conditions are essentially unchanged;

(B) The field data was initially compiled and certified on or after July 21, 1987;

(C) Its continuing validity is properly certified using the Department's affidavit form (i.e., Designer's Affidavit of Continuing Validity of Field Data);

(D) The affidavit submittal is accompanied by the submission of a complete ISDS or subdivision suitability application; and

(E) The proper fees accompany the submittal.

(3) Affidavits will not be accepted to renew field data only, apart from an ISDS application/suitability submittal. The affidavit does not renew an ISDS system approval. A new original application and four sets of new plans meeting all current regulations must be submitted. The old approval is not renewable even if the design is unchanged.

(4) Previously renewed field data older than July 21, 1987 are not affected provided that the data are part of a currently approved ISDS application or subdivision suitability. All currently approved applications are valid until their expiration date regardless of field data age.

(5) When an application is received for an approved lot within a subdivision with a valid Subdivision Suitability certification issued pursuant to SD 18.01, the field data within that subdivision is considered valid for a period of five (5) years from the date the suitability was approved.

(h) Public Records - All applications received by the Department of Environmental Management are subject to the Public Records Act, R.I. General Laws Chapter 38-2, and are available in accordance with the Act for public inspection and copying at the Individual Sewage Disposal System Program of DEM between the hours of 8:30 AM and 4:00 PM; a prior appointment may be required. A fee for such copying shall be charged in accordance with R.I. General Laws Section 38-2-4, as amended.

(i) Systems Disposing of 10,000 GPD or More - Applicants for individual sewage disposal systems designed to dispose of ten thousand (10,000) gallons or more per day shall obtain a groundwater quality certification in accordance with RIDEM's Rules and Regulations on Groundwater Quality sections 17.01(e), 17.02 and 17.03, as amended, prior to approval of the application by the ISDS Section.

SD 2.05A System Installation for Applications Not Prepared by Designers Licensed in Accordance with Section 25.00

(a) The construction, alteration, or reconstruction of any individual sewage disposal system shall be performed by an installer licensed under Chapter 5-56 of the General Laws of Rhode Island, as amended, or a master plumber licensed under Chapter 5-20 of the General Laws of Rhode Island, as amended. The installer of the system shall certify that the system was installed in conformance with the permit and plans for such system approved by the Director and any terms stipulated by the Director as part of the approval (*). The certification shall be on forms provided by the Director. The signed certification shall be sent to the Director within three (3) days after the system is installed. The installer shall notify the Director at least twenty- four (24) hours before any approved individual sewage disposal system is to be installed to permit the Director at his discretion, to inspect the system during or after installation before covering any component of the system with earth; however, such covering must be completed within 48 hours of authorization by the Director to cover.

Whenever the Director requires the bottom of leaching area inspection as term of his approval, the installer shall notify the Director at least twenty-four (24) hours in advance for said inspection prior to construction of the system or any gravel placement. In such cases, the installer shall have the gravel base material to be used on the site when ever possible.

If the installer encounters unanticipated conditions during construction which indicates that the system cannot be installed in accordance with the original approved application, plan and specifications, or any terms and conditions contained therein, he shall stop the construction and notify the designer and the Director. A revised application and/or plan must be filed showing any change from the original approved application, plan and specifications for approval.

(b) The Director may require, at his discretion, that the construction, alteration or reconstruction of any individual sewage disposal system, or portion thereof, be supervised and certified by a registered professional engineer or registered land surveyor. The construction, alteration or reconstruction of any such system designed to dispose of over 2,000 gallons per day must be certified by a registered professional engineer.

NOTE: Installers should leave a copy of the certificate of construction which details the location of the septic system, in the home in the vicinity of the building sewer.

(*) Where installed by the homeowner in accordance with Section 5-56-1 of the General Laws of Rhode Island 1956, as amended, the homeowner may execute the certification of construction.

SD 2.05B System Installation for Applications Prepared by Designers Licensed in Accordance with Section 25.00

(a) The construction, alteration, or reconstruction of any individual sewage disposal system shall be performed by an installer licensed under Chapter 5-56 of the General Laws of Rhode Island, as amended, or a master plumber licensed under Chapter 5-20 of the General Laws of Rhode Island, as amended.

(b) If the installer encounters unanticipated conditions during construction which indicates that the system cannot be installed in accordance with the original approved application, plan and specifications, or any terms and conditions contained therein, he shall stop the construction and notify the licensed designer that is responsible for witnessing and inspecting the installation in accordance with SD 27.00(c).

(c) The licensed designer that witnesses and inspects the installation of the ISDS in accordance with SD 27.00(c) shall be responsible for issuing the certificate of construction in accordance with SD 27.00(i).

SD 2.16 Individual Sewage Disposal System Application Involving Freshwater Wetlands

(a) Approval for individual sewage disposal systems that are located within fifty (50) feet of a marsh, swamp, bog or pond, or within one hundred (100) feet of a river of less than ten (10) feet in width during normal flow, or within two hundred (200) feet of a river of ten (10) feet or more in width during normal flow, or within a flood plain or other freshwater wetland as defined in the Rhode Island General Laws Section 2-1-20, will not be issued until the Freshwater Wetlands Section of the Department of Environmental Management issues a wetlands permit or determines that the Wetlands Act does not apply to the proposed new construction or new installation.

** NOTE: If there is any question concerning the location of freshwater wetlands or applicability of the proposed individual sewage disposal system and related building or site improvements to the Freshwater Wetlands Act, the Department strongly recommends that application for wetlands determination be made to the Wetlands Section prior to approval to avoid delays in individual sewage disposal system permit review. If freshwater wetlands are located in the vicinity of the proposed individual sewage disposal system, related improvements that are not limited to: 1) Construction or alteration of a building served by the individual sewage disposal system. 2) Earth removal, filling or grading associated with proposed site improvements, building construction or individual sewage disposal system improvements. 3) Alteration of groundwater or surface water flow resulting in discharge of flow in or near a wetland.

(b) If the Individual Sewage Disposal System Section determines that there is a reasonable doubt as to the location of a freshwater wetlands boundary or applicability of the Wetlands Act to the proposed new construction or new installation of an individual sewage disposal system, the Individual Sewage Disposal System Section shall require that the applicant request a preliminary applicability determination from the Wetlands Section in which case the individual sewage disposal system approval shall not be granted without submittal of either a determination that the

Wetlands Act does not apply or an approved wetlands permit, and a copy of the current, approved plans, stamped by the Wetlands Section.

SD 15.05 Persons Qualified to Test

(a) Engineers and Surveyors - Percolation tests, ground water table elevation determinations, and the gathering and submission of other essential information shall be carried out by a registered professional engineer or registered land surveyor at the expense of the owner or developer.

(b) Sanitarians and Soil Scientists - Percolation tests, determination of the depth to the ground water table, may be carried out by a qualified professional sanitarian or soil scientist approved by the director. Such approval shall be made on the basis of satisfactory experience and education in the area of soil science and standards for the design and construction of individual sewage disposal systems. Such qualifications shall be presented in writing.

(c) Home Owner - If the property owner is installing, constructing or altering an individual sewage disposal system to serve a building he occupies or will occupy as his intended permanent domicile, he or his representative may prepare the necessary holes and carry out the tests as prescribed in these regulations.

(d) The Director may require that all soil examinations be performed in the presence of one of his agents.

(e) Class IV Soil Evaluator – Percolation tests and determination of the depth to the ground water table may be carried out by a licensed Class IV Soil Evaluator.

SD 17.02 Dry Season Determinations - Although the groundwater table is more accurately measured in the wet season, data may be available or developed throughout the year to predict the maximum groundwater table elevation during the wet season. To make a dry season determination, the applicant shall dig a ten (10) foot test hole in the location of the proposed leach field area. Each test hole shall be witnessed by an agent of the Director. In addition, the applicant shall submit data and comply with the procedures set forth in either (a) or (b) below whichever is applicable.

(a) In cases where the soil consists of: unconsolidated sand or gravel outwash to a depth of at least ten (10) feet; has a percolation rate not greater than five (5) minutes per inch; and groundwater or ledge is not encountered within ten (10) feet of original ground surface, an adjustment factor may be applied to the observed groundwater table in order to correct to the Maximum Groundwater Table Elevation. This adjustment factor is to be determined by the Director. If the corrected groundwater table depth is less than four (4) feet, or if ledge and soil other than unconsolidated sand and gravel outwash is encountered less than ten (10) feet below the original ground surface, the groundwater table must be determined in the wet season or in accordance with 17.02(b) below. A test hole shall be witnessed by an agent of the Director, and the Director or his/her agent shall make the final determination as to all factual matters.

(b) Where soil conditions are other than those described in SD 17.02(a) above, the designer shall collect, evaluate and provide to the ISDS Section all pertinent information relative to accurate groundwater table elevation determination in conjunction with the designer's specific professional conclusions and sworn affidavit as to groundwater table elevations. Such "pertinent information" to be provided to the ISDS Section shall be as follows:

(1) Groundwater table data from an approved lot in the immediate area;

(2) Seasonal water elevations in nearby wells and/or surface water bodies;

(3) USDA Soil Conservation Service maps;

(4) Any other data deemed necessary by the ISDS Section.

The Director may require that the above data be verified by one of his/her agents, and shall make the final determination as to all factual matters involved.

(c) The above procedures for dry season determinations set forth in SD 17.02(b) above may **not** be available to determine the groundwater table where;

(1) The groundwater table is estimated to be within four (4) feet of the original ground surface; or

(2) an impervious layer is within six (6) feet of the original ground surface; or

(3) sewage flows from the proposed system are anticipated to meet or exceed 2,000 gallons per day; or

(4) a variance is requested for projects not meeting procedures in SD 17.02(a); or

(5) the existing soil is a dark silt loam such as, a Mansfield, Newport, Pittstown and/or Stissing soil series as defined by the United States Department of Agriculture Soil Survey of Rhode Island.

(d) Until such time that a site evaluation is required pursuant to SD 2.01(b)(1), the Department may allow a dry season determination under conditions that do not meet the requirements of 17.02(a)-(c) if the determination is conducted by a licensed Class IV soil evaluator done in accordance with the soil evaluation procedures in 26.01.

SD 26.00 Site Evaluation

(a) Site evaluations required by the Department in accordance with SD 2.01 shall be done in a manner described in this section. The site evaluation shall provide information that will determine the acceptable types of ISDSs for a site. The site evaluation report shall:

(1) Describe and interpret soil morphology in regards to the proper functioning of ISDSs utilizing the soil as part of the treatment process;

(2) Characterize the lithologic and hydrologic limiting layers affecting the siting and functioning of ISDSs; and

(3) Document site limitations for the placement of ISDSs.

(b) The site evaluation report shall be prepared on forms approved by the Director. The site evaluation report shall contain a site sketch and identification of specific site conditions and limitations relative to the proposed disposal area. The report shall include, but not be limited to, the information below. The information in (1) and (2) below, which shall be referred to as the soil evaluation, shall be completed by a Class IV soil evaluator, and may be required to be witnessed by the Director in accordance with SD 26.00(c) and (d). The soil evaluation shall be done in accordance with SD 26.01. The information in items (3)-(11) shall be completed by a Class II or III designer or Class IV soil evaluator.

(1) Comprehensive soil profile description and textural analysis identifying the characteristics and using the terminology in Appendix 1;

(2) Identification of seasonal high water table;

(3) Assessment of depth to bedrock done in accordance with SD 15.04(d);

(4) General description of slope;

(5) Presence of any watercourse, wetlands, surface water bodies, existing and proposed private drinking water wells within 200 feet;

(6) Presence of any public drinking water wells within 500 feet;

(7) Determination if the site is within the watershed of a public drinking water reservoir or other critical area defined in SD 19.00;

(8) Areas on the site where soil has been excavated and where fill has been deposited determined in accordance with SD 15.04(e);

(9) The site's potential for flooding;

(10) Approximate location of property lines; and

(11) Any other relevant information about the site.

(c) The Director shall determine if the soil evaluation component (SD 26.00(b)(1) and (2)) of the site evaluation must be witnessed by the Department. An application to schedule the soil evaluation shall be submitted to the Director prior to conducting the soil evaluation field work on the site. Such application will be on forms approved by the Director and will require at minimum a locus map and photocopy of the relevant page or section thereof from the USDA Soil Survey with the site location marked. The Director shall notify the applicant within 10 business days of receipt of the application as to whether or not the soil evaluation must be witnessed by the Department.

(d) Soil evaluation to be witnessed by the Department

(1) At the time of the notification in SD 26.00(c) above, an appointment will be scheduled for the Department to witness the soil evaluation. This time shall be within 15 business days of the Director's notification in SD 26.00(c) above.

(2) Requests for cancellation of the soil evaluation appointment will be accepted by the Director up to 24 hours in advance of the scheduled appointment, and if requested, will be rescheduled for the next available date. All other cancellations, including instances where the Director is on-site and the licensed designer or soil evaluator is not present, will require reapplication to the Director. If the Director is not on-site for the scheduled appointment, the completed site evaluation report shall be submitted to the Director prior to the submission of the application for an individual sewage disposal system permit.

(3) The soil evaluator shall complete the soil evaluation form prior to the arrival of the Director on-site for the scheduled appointment with the Department. While in the field, the Director shall determine which of the following apply:

(A) The Director concurs with the soil evaluation. An application for an individual sewage disposal system permit may be submitted to the Director along with the submission of the complete site evaluation report; or

(B) The Director does not concur with the soil evaluation, in which case the complete site evaluation shall be submitted to the Director in accordance with SD 26.00(f) prior to the submission of the application for an individual sewage disposal system permit.

(e) Soil evaluation <u>not</u> to be witnessed by the Department – If the Director determines that the Department need not witness the soil evaluation, the licensed designer or soil evaluator shall notify the Department during normal business hours by telephone of the date and time of the soil evaluation at least 24 hours prior to conducting the soil evaluation. The Department, at its discretion, may make unannounced inspections of any soil evaluation. The complete site evaluation report shall be submitted to the Director prior to the submission of the application for an individual sewage disposal system permit.

(f) The site evaluation report shall be submitted to the Director within 90 days of the date of the soil evaluation, unless wet season monitoring is necessary in accordance with 26.01(c)(4) to determine the seasonal high water table,

in which case the site evaluation shall be submitted to the Director with the wet season monitoring data. After review of the site evaluation report, the Director shall either:

(1) Approve of the site evaluation;

(2) Determine that the site evaluation is not in compliance with these regulations or that more information must be collected, in which case a revised site evaluation report must be submitted to the Director; or

(3) Disclaim the determinations of the site evaluation, and provide an explanation for not accepting it.

(g) The site evaluation report shall be accompanied by a certification, on a form approved by the Director, that the site evaluation was conducted in a manner consistent with these regulations and that it is an accurate portrayal of site conditions on the day and time they were conducted. If more than one person licensed under these regulations participated in the development of the site evaluation report, the report must specify who prepared which part and include a certification from each licensee.

(h) Approval of a site evaluation indicates only that the site evaluation was conducted in compliance with these regulations. It is not an indication of the correctness or quality of the site evaluation.

26.01 Soil Evaluation—For Persons Licensed as a Class IV Soil Evaluator in Accordance with Section 25.00

(a) Soil Observation Pits - A minimum of two soil observation pits shall be excavated within the area of the proposed leachfield, with one pit on the uphill side and one on the down hill side of the proposed leachfield. The Director may waive the requirement for a second soil observation pit where the conditions indicate that such pit is not necessary.

(1) The observation pits shall be excavated to a depth no greater than 5 feet to allow detailed examination by the soil evaluator.

(2) After the soil evaluation is completed and witnessed by the Department, if required, the observation pit shall be extended or an additional observation pit shall be excavated to a minimum depth of 10 feet.

(3) If impervious material is encountered or the observation pit becomes unstable due to lack of soil cohesion and/or the presence of groundwater, the observation pit may be terminated at a depth of less than 10 feet. Sites with observation pits which have been terminated at less than 10 feet may require additional testing as determined by the Director.

(4) It is recommended that persons performing the soil evaluation not enter into portions of a soil observation pit which have been excavated to depths greater than five feet below the surrounding ground surface. It is the responsibility of persons performing or witnessing the soil evaluation to comply with all applicable federal, state and local laws and regulations governing occupational safety.

(b) Soil Profile Analysis – On forms approved by the Director, the soil evaluator shall evaluate each soil horizon for depth, color, presence of redoximorphic features, texture, structure and consistence using the terminology in Appendix 1. The information collected shall be used to assign the soil to one of the soil classes below, except for Class G soils in which case the soil class for the substratum shall also be indicated. (Additional information about each soil class is located in Appendix 2.)

(1) Class A – Glacial Lodgement Till: Silt loam to loamy sand texture. Lower profiles tend to have a platy structure and are dense to very dense. Excavation is difficult. High probability of hydraulically restrictive lower layers. Angular rock fragments and occasional cobbles and stones.

(2) Class B – Glacial Ablation Till: Silt loam to loamy sand throughout the profile. Lower horizons tend to be more sandy. These soils tend to be looser than lodgement tills and typically do not have hydraulically restrictive layers. Lower horizons may be firm. Angular rock fragments and occasional cobbles and stones.

(3) Class C – Proglacial Outwash Deposit: Also referred to as stratified drift, soil textures range from silt loam to loamy sand (in the upper horizons) to a sandy/gravely substratum. Stratified layers of water sorted materials may be present. Entire profile tends to be loose and easy to dig except saturated hoizons may be firm or cemented or both. Horizons of rounded rock fragments are common. A silty eolian mantle may also be present.

(4) Class D – Glacial Ice Contact Deposit: Outwash deposits of well to poorly sorted sands and gravel. Texture can be highly variable over short distances and may include pockets or lenses of silt or silt loam. Stratification may be irregular or absent. Sub-rounded to rounded stones and cobbles are possible.

(5) Class E – Coastal Dune Deposit: Fine to coarse sands, well sorted, often finely stratified. Little or no silt and clay. Typically no sediment larger than coarse sand. Deposited by wind action or storm overwash.

(6) Class F – Alluvial Deposits: Material transported and deposited by streams and rivers. Typically well sorted, stratified, fine textured sediment that may have dark layers in the substratum which were at one time surface layers. Subject to seasonal flooding.

(7) Class G – Eolian Deposits: Wind blown silts deposited after the retreat of the Wisconsin glaciation. Typically brown to dark brown silt ranging in thickness of several inches to several feet. Underlain by outwash, ablation till, or lodgement till.

(c) Determination of Seasonal High Water Table

(1) The soil evaluator shall use the depth to, type, location and abundance of hydromorphic features and other characteristics to determine the depth to the seasonal high water table. The criteria to use in evaluating hydromorphic features include, but are not limited to the following:

(A) Redox depletions and/or redox concentrations occupy 2% or more of the exposed horizon surface;

(B) Soil matrix and redox concentrations/depletions vary 2 or more units in chroma; or

(C) Presence of a reduced soil matrix, which is often indicated by a color chroma less than or equal to 2.

(2) In cases where the soil is class C or D as determined in 26.01(b) and there are no observable hydromorphic features to use to make a determination in accordance with (1) above, an adjustment factor may be applied to the observed water table in order to correct to the seasonal high water table. This adjustment factor shall be determined by the Director. When groundwater is not encountered in a soil observation pit at least 10 feet deep, the adjustment factor may be applied as measured from the bottom of the pit.

(3) A perforated pipe at least 4 inches in diameter shall be installed to the full depth of the excavation in each soil observation pit at the conclusion of the soil evaluation, unless such requirement is waived by the Director. The pipe shall be capped at the top and mounded to prevent the accumulation of surface water.

(4) The soil evaluator has the option to determine the seasonal high water table during the wet season in accordance with SD 17.01. The seasonal high water table shall be determined during the wet season in accordance with SD 17.01 when either of the following occurs:

(A) The soil evaluator and the representative of the Department disagree on the determination of the seasonal high water table during a witnessed soil evaluation; or

(B) The soil is determined to be one of the following soil series as described in the United States Department of Agriculture Soil Survey of Rhode Island: Mansfield, Newport, Pittstown or Stissing.

EFFECTIVE DATE

The foregoing amendments to the "Rules and Regulations Establishing Minimum Standards Relating to Location, Design, Construction and Maintenance of Individual Sewage Disposal Systems," after due notice, are hereby adopted and filed with the Secretary of State this __17th_ day of ___February_, 2000 to become effective twenty (20) days thereafter, in accordance with the provisions of Chapters 5-56.1, 23-19.5, 42-35, 42-17.1, 42-17.6 of the General Laws of Rhode Island of 1956, as amended.

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Jan H. Reitsma, Director
Department of Environmental Management

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